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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/683,322	12/13/2001	Shankara B. Reddy	0391999529-0	6103

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EXAMINER	
NASSER, ROBERT L	
ART UNIT	PAPER NUMBER
3736	

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/683,322	Applicant(s) REDDY ET AL.	
	Examiner Robert L. Nasser	Art Unit 3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-39 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant recites detecting the risk of Cardiac Syndromes. A syndrome is usually a grouping of symptoms without a specific diagnosis. Myocardial infarction is a specific diagnosis. It seems that syndrome is not the proper word to use. As far as the scope of the claims is concerned,. The examiner is relying on applicants' definition of cardiac syndrome on page 1,i.e. myocardial infarction, non-ST-elevated MI, and cardiac ischemia.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 5-17, 23, 25-36, 38, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Groth et al in view of Campbell et al. Groth et al teaches a system in figure 3a that detects ekg data, patient history data, and biomarker data, provides an indicator of each, and combines the indicators in an overall classification of cardiac syndromes. It diagnoses the syndrome, not the risk. Campbell et al shows a

similar system that assesses the risk of acquiring the syndrome based on similar patient data. From this teaching, it would have been obvious to modify Groth et al to assess the risk of AMI, as it is merely substitution of one known assessment technique for another. With respect to claims 9, 10, 15, 16, 29, 30, 35, and 36, Groth et al does not have a imaging device. Campbell however teaches in column 14, lines 41-55, that imaging data may be use din combination with the data measured by Groth et al to assist in assessing AMI. Therefore, it would have been obvious to modify Groth et al to use an imaging device, to provide improved data as to the patient's condition. The exact type of imaging device would have been obvious to one skilled in the art.

Claims 3, 4, and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Groth et al in view of Campbell et al as applied to claims 1, 2, 5-17, 23, 25-36, 38, and 39 above, and further in view of Anderson et al and Lachejewski. The above combination uses a neural network to analyze the data. Anderson et al teaches the equivalence of neural networks and fuzzy logic systems for analyzing systems like that of Groth. Hence, it would have been obvious to modify Groth to use a fuzzy logic system, as it is merely the substitution of one known equivalent logic for another. In addition, Lachejewski teaches in clumn 9, lines 4-47, a fuzzy logic system including fuzzifiying, inferencing, and defuzzifying. It further teaches that mandami inference is includes membership functions and is a known fuzzy logic technique. Hence, it would have been obvious to modify the above combination to use a mandami inference system as it is merely the substitution of one known logic system for another.

Claims 24 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Groth et al in view of Campbell et al as applied to claims 1, 2, 5-17, 23, 25-36, 38, and 39 above, and further in view of Anderson et al. The above combination uses a neural network to analyze the data. Anderson et al teaches the equivalence of neural networks and fuzzy logic systems for analyzing systems like that of Groth. Hence, it would have been obvious to modify the above combination to use a fuzzy logic system, as it is merely the substitution of one known equivalent logic for another.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Armstrong et al, Jackowski, Karpf, and Xue et al all show analysis systems similar to the current invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert L. Nasser whose telephone number is (703) 308-3251. The examiner can normally be reached on Mon-Fri, variable hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (703) 308-3130. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

Robert L. Nasser

ROBERT L. NASSER
PRIMARY EXAMINER